

CLAIMS

1. A nonwoven fabric production process which comprises

5 a laminating step in which composite yarn, obtained by bundling a plurality of resin single filaments each having a core-sheath structure with a filamentous core resin surrounded by a sheath resin with a melting point of at least 20°C lower than the core resin and fusing said sheath resin together, is laminated in at least the three directions of warp direction, slant direction and reverse slant direction,

10 and a bonding step of heating the laminated composite yarn at a temperature lower than the melting point of said core resin and higher than the melting point of said sheath resin for bonding.

2. A nonwoven fabric production process according to claim 1, wherein said composite yarn consists of 10-500 of said resin single filaments, and wherein in said composite yarn, said core resin forms filamentous island sections with a size of 1-70 dtex and the fused said sheath resin forms sea sections.

3. A nonwoven fabric production process according to claim 1 or 2, wherein said core resin and said sheath resin are polyolefins.

20 4. A nonwoven fabric production process according to any one of claims 1 to 3, wherein said core resin is polypropylene and said sheath resin is polyethylene with a melting point of no higher than 120°C.

25 5. A nonwoven fabric having composite yarns each composed of 10-500 filamentous island resin filaments with a size of 1-70 dtex situated in a filamentous sea resin, and laminated in at least the three directions of warp direction, slant direction and reverse slant direction, with the sea resin melted to bond together the laminated composite yarns, the

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nonwoven fabric being characterized in that said sea resin has a melting point of at least 20°C lower than said island resin.

6. A nonwoven fabric according to claim 5, wherein said island resin and said sea resin are polyolefins.

5 7. A nonwoven fabric according to claim 5 to 6, characterized in that said island resin is polypropylene and said sea resin is polyethylene with a melting point of no higher than 120°C.

8. A nonwoven fabric according to any one of claims 5 to 7, wherein the weight ratio of said island resin and said sea resin is 20:80-80:20.